

Borelight Zero Procedures

Use of Bore light

NOTE: Completely familiarize yourself with the use and operation of the laser borelight by reading the Operators Manual. A laser borelight manual is supplied with each kit.

WARNING: VISIBLE LASER RADIATION - To reduce the risk of injury AVOID DIRECT EXPOSURE TO THE BEAM - Use Ballistic Laser Eye Protection (BLEPS) when handling or operating.

CAUTION: Do not look at the laser through the BLEPS.

Arms Room Borelight Dry Zero Procedure

1. **WARNING** - Before inserting the borelight into weapon, perform Preventative Maintenance Checks and Service (PMCS), clear weapon and visually inspect the chamber to insure that it is empty and no ammunition is in position to be chambered. Additionally, inspect rifle bore and muzzle to assure there are no obstructions. Clean if necessary.
2. Check/Inspect screw on top of rail, rail cross slot T-14, to assure that it is tight
3. Stabilize the weapon. This can be accomplished by placing the weapon in a rifle box rest, gun vise, or rifle holding device (see FM 23-9, dated July 1989, figure C-6, page C-60). If these items are not available, go to step 4. If available, go to step 5.
4. Lay or position weapon on a solid stable surface such as a heavy table. Choose a weapon position where the weapon is most stable. Ignore weapon cant at this time. (**Note:** Weapon can be stabilized by using a carpenter's wood clamp set or EZ Hold/Quick Grip clamps. If these types of items are not available, apply moderate hand pressure on the weapon.) An unobstructed line of sight of 10 meters is required. A 10-meter length of cord is included with the laser borelight kit. 10 meters is measured from top rail cross-slot labeled "T-14".
5. **WARNING:** DO NOT TURN ON THE LASER BORELIGHT AT THIS TIME. Wipe laser borelight mandrel with a clean cloth and apply a light film of oil on the mandrel. Insert laser borelight mandrel in weapon muzzle using a light steady force until the mandrel taper seats in the muzzle. **CAUTION:** Do not apply an excessive inward force to the laser borelight once the tapered end of the mandrel has seated in the muzzle.

6. **ZEROING THE BORELIGHT:** This procedure requires a minimum of **TWO** people. One person to stabilize weapon and rotate and adjust the borelight and a second person at the target board to call out adjustments.

WARNING: Both individuals **MUST** wear Ballistic Laser Eye Protection (BLEPS).

DANGER: DO NOT LOOK DIRECTLY INTO LASER BEAM - DO NOT LOOK INTO LASER THROUGH BINOCULARS OR TELESCOPES OR BLEPS - DO NOT POINT LASER AT MIRROR SURFACES - DO NOT SHINE LASER INTO OTHER INDIVIDUALS' EYES.

- Select and place the proper 10-meter zeroing target at a 10-meter distance from the top rail screw T-14.
- For zeroing the borelight, the target board **MUST** be kept level. Ignore weapon orientation at this time.
- Turn on the borelight laser. With the help of an assistant, hold a target at 10 meters and place the target board so that the laser dot strikes the center of the dot on the target board.
 - **Note:** Rotate the borelight clockwise; rotating counter-clockwise may cause the borelight to unscrew from mandrel. Slowly rotate the borelight while watching the dot made by the laser on the target dot. If the laser dot remains stationary the borelight is aligned and bore sighted to the weapon. At this point you may start the sighting procedures for your selected optic sight.
- If the laser dot rotates in a circular pattern, the borelight windage or elevation or both **MUST** be adjusted using the following procedures. This procedure can be done at the 10-meter distance or you can move the target in as close as 2 meters.
- Slowly rotate the borelight one-half turn. Note the new location of the laser dot. Adjust the borelight windage and elevation until the laser dot moves half the space from its original location. Continue the procedure until the laser dot remains stationary when the Bore light is rotated. If target board was moved closer to the borelight, move target back to a distance of 10 meters and re-check boresight. If boresight is correct the weapon is ready to zero the optic sight.